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Comments to Docket 07-BSTD-1; JA7 - 2008

On behalf of Honeywell Specialty Materials we would like to offer the following comments and recommended revisions to the Title 24 revisions related to spray foam insulation, including but not limited to energy efficiency values, installation procedures, permeability and aging.

JA 4.7 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.11 Second paragraph - Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.18 Second paragraph - Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation.

JA 4.22 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation.

JA 4.24 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.26 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.27 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.28 R-Value listed is incorrect. Polyisocyanurate is listed as having an R-value of 7, which is incorrect. This section should be revised to reflect a R-value for polyisocyanurate as 6.

JA 4.30 Second paragraph - Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.33 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.45 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.50 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA 4.54 Revise to add closed-cell polyurethane foam, rigid polystyrene or polyisocyanurate foam insulation

JA7.2 Medium density foam definition needs to be revised to show both 2 lb wall and 3 lb roof application in the definition of closed-cell foam insulation along with their compressive strengths

JA 7.2 We recommend that the use of vapor barrier under JA 7.3 be removed (see JA 7.3 comments) In the alternative, the language should be amended to add definitions for vapor barriers and vapor retarders to definitions section of JA 7.2 as follows:

For puposes of this section:
Vapor barriers have a water vapor permeance of 0.1 perms or less
Vapor retarders have a permeance of 1.0 perms or less.

JA 7.3 The reference here should be changed from "Vapor barrier" to "Vapor Retarder" – see comments in JA 7.2 recommending the addition of a definition for vapor barriers and vapor retarders.

JA 7.3 Vapor barrier/retarder films should not be required for open-cell foams in most warm and temperate climate zones in California. In these particular climates, vapor retarder films are not technically justified and add unnecessary cost to the consumer.

JA 7.4.2 Figure 3: Option 3 in Figure 3 should be removed from the document as a method to insulate. While the method is technically correct, it is not practical as a method to insulate since the garage ceiling and attic subfloor must be in place before the foam is applied to the band joist thereby preventing access to the installer to apply the foam. Recommend that Option 1 in Figure 3 be removed.

JA 7.6.2 In the Note section of this requirement the language regarding unvented attic requirements appears contradictory or at the least, ambiguous. Does the T 24 building code permit both vented and unvented attics?

JA 7.9 This section should be revised eliminating the fixed, minimum value of R 5.8/in and changing the requirement to "as reported by the manufacturer, measured in a properly aged condition per ICC AC12." The reason for this requested change is that the R-value for closed-cell SPF can vary from R 5.8/inch to nearly R 6.9/inch. *In the alternative, if the CEC determines that a specific R-Value is necessary for listing in JA 7.9, the fixed value assigned should be a R-value of R6.2/inch of 2 lb closed-cell wall foam and R6.7 per inch for 3 lb closed-cell roofing foam ensuring consistency with the requirements for ASTM C1029.

General comments that should be addressed throughout the JA:

Honeywell is opposed to efforts to remove the requirement for full-cavity fill for open-cell foams as proposed in some public comments to the CEC. A partial fill with open-cell foam with not permit 2x4 walls to be insulated to R13, or 2x6 walls to R19 as required under the International Energy Conservation Code. Removal of the requirement that all open-cell foam installed in wall cavities be completely filled would significantly reduce the energy efficiency of construction in California and place California's standard at a lower standard than that of the IECC. We respectfully request that you retain the requirement for full-cavity fill for open-cell foams.

Foam thermal conductivity aging data on HFC-245fa foams, isopentane foams, and foams made using a mixture of HFC-245fa and isopentane show that although the absolute value of the foams' thermal conductivities are different, their rates of aging are the same. In the Joint Appendix the aging protocol for foams prior to testing treats pentane blown foams differently with no technical justification. The industry has repeated references and supporting data that foams containing pentane age in a manner similar to foams containing other non-air blowing agents. Therefore, we respectfully request that the treatment of pentane blown foams the same any other non-air blowing agent for purposes of this standard and that hydrocarbon foam should not be subject to an aging process.

Finally, throughout the document in reference to Spray-applied Foam Plastic Insulation, specific reference should be added as "defined by ICC-ES AC377 Acceptance Criteria for Spray-applied Foam Plastic Insulation". This specific reference and definition goes into effect in March of 2008 . If necessary, the CEC may consider additionally listing the current Acceptance Criteria 12 (AC 12) as adopted and defined by the International Code Council, in effect until the new AC 377 goes into effect in March of 2008.

On behalf of Honeywell International, Specialty Materials business we respectfully submit these comments for your consideration. If you have any questions, please contact me at the number listed below.

Sincerely,

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Cc: Maziar Shirakh